

List 4 environmental justice aspects of Port Neches based off the content or concepts learned from this course. For example use a term learned in this course and link it to Port Neches.

1. Port Neches is home to an active superfund site named the Star Lake Canal. Several chemical companies such as Huntsman and Chevron Mobil have been using the site for unpermitted dumping since the 1940's. Environmental pollutants included concentration of chromium, copper, polycyclic aromatic hydrocarbons , and polychlorinated biphenyls in the canal sediments. These pollutants are currently thought to be contained but can have a varying array of health problems if ingested in large doses by humans. The damage has destroyed wetland ecosystems as well.

<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0605043#Sample>

2. The TPC plant had 8 unauthorized emission events between 2018-2019 before the plant exploded in November of 2019. As much as 50 KG of Butadiene was released into the air. TPC group has had multiple fines and lawsuits in the previous years due to elevated admission rates. This chemical is known to cause cancer. It is also linked to heart disease with long term exposure. Acute symptoms include irritation of the eyes, nose and throat.

<https://cen.acs.org/safety/TPC-faces-consequences-Texas-explosion/98/web/2020/02>
<https://www.epa.gov/sites/production/files/2016-08/documents/13-butadiene.pdf>

3. After the TPC incident the TCEQ went to the Port Neches and surrounding areas and used hand held air monitors to measure the impact of the explosion. The most noticeable chemicals released were VOC's that cause nausea, headaches, irritation of the nose and throat, and shortness of breath. Several areas had a smell of burnt plastic in association of these chemicals.

<https://www.tceq.texas.gov/downloads/response/tpc-incident/tpc-handheld-fire-monitor-data-11-27-2019.pdf>

4. The Port Neches water system has had numerous violations. There are reports of at least 6 different chemicals in the water supply that, while are in the legal limit, are over 100 times over the recommended health levels for humans. Coincidentally some of these chemicals are the by products of the sanitation process such as Bromochloroacetic acid.

https://dww2.tceq.texas.gov/DWW/JSP/Violations.jsp?tinwsys_is_number=3875&tinwsys_st_code=TX&wsnumber=TX1230096%20%20%20&DWWState=TX

<https://www.ewg.org/tapwater/system.php?pws=TX1230010>